CICAPP-0011 (V1.0) May 22, 2015

Calibrating the IM-II

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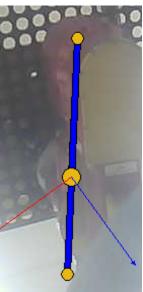


Purpose

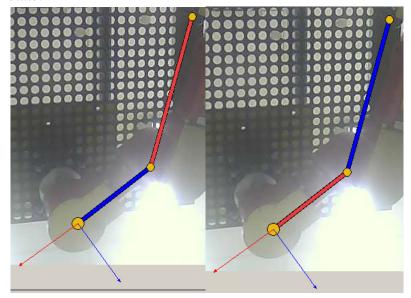
In order to automatically position under a tube, the IM-II must be calibrated in the EddyVision acquisition software.

Procedure

1. Once connected to the IM-II (see CICAPP-0010), unfold the parked IM-II arm by moving axis 2 only. To move axis 2, select it in the stick figure model and rotate the mouse wheel. Scrolling toward yourself will rotate axis 2 in a clockwise motion.



- 2. Once out of the park position, move to a known tube location. The IM-II can be moved several ways from either the stick figure or guide tube camera window.
 - a. Axis 1/2 can be independently rotated by clicking axis 1/2 of the stick figure and using the wheel to rotate.





b. Both axis 1/2 can be moved simultaneously by clicking and dragging the stick figure end to desired location.

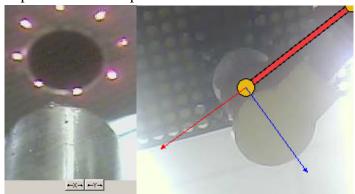


c. From the guide tube camera window in the upper left window, left click and drag to make IM-II jog in the direction of the mouse. The orange arrow will increase in size and IM-II jog speed will increase as the mouse is dragged further from the starting point. Holding shift while dragging will put the IM-II into a slide mode in which the IM-II will only move the speed and distance the mouse is moving.

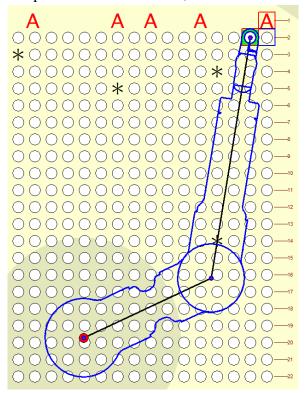




d. IM-II can be moved in the factory calibrated X/Y direction by clicking and holding X or Y in the camera window. A single click on X/Y will nudge a predefined distance. Left clicking increments while right clicking decrements. Positive X direction corresponds to the red arrow while positive Y corresponds to the blue arrow.

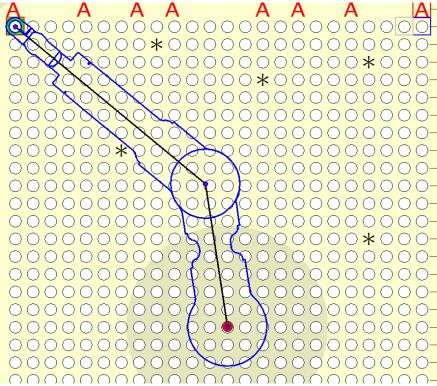


3. Once in position, right click on the map and select "Set Cal Point". Repeat for cal points two and three. It is recommended that initial cal points are close to each other and preferably form a right triangle. Once three cal points have been added, an outline of the IM-II will be displayed.





4. Double click a tube further away in the X direction, adjust location as needed, and add another cal point. Repeat for Y direction.



5. Begin acquisition and add/delete cal points as needed.